C. The Relevant Geographic Market

55. In the *Cingular-AT&T Wireless Order*, the Commission concluded that the relevant geographic markets were local areas. In particular, the Commission evaluated subscriber shares within Component Economic Areas (CEAs), as defined by the Bureau of Economic Analysis of the Department of Commerce,[26] and Cellular Market Areas (CMAs), the geographic areas used by the Commission in its initial cellular licensing proceeding.

56. The Commission used two sources of subscriber data: Numbering Resource Utilization/Forecast (NRUF) data, which track telephone numbers used by all telecommunications carriers, including wireless carriers, and are collected "on a rate center area basis";[27] and billing data that were submitted by the six nationwide carriers "in response to a staff data request"[28] from which the Commission calculated the number of subscribers per zip code for each carrier. The Commission then aggregated these subscriber data to CEAs and CMAs. As discussed below, we use Telephia data to delineate the local markets in our analysis.[29]

57. The Commission concluded that there was enough local variation in mobile prices to reject the national market definition proposed by Cingular and AT&T Wireless.[30] In this Declaration, we follow the Commission and assume that the relevant geographic markets are local.[31]

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[26] See K.P. Johnson, "Redefinition of the BEA Economic Areas," *Survey of Current Business*, February 1995, pp. 75-81.

[27] *Cingular-AT&T Wireless Order* ¶ 102. According to the Commission, rate centers are generally smaller than counties. However, a subscriber can be served by a rate center that is located in a county other than the one in which he resides.

[28] *Id.* ¶ 103.

[29] We did not have access to the NRUF and carrier billing data in preparing this Declaration.

[30] *Id.* ¶ 88.

[31] Although we adhere to the Commission's geographic market definition for purposes of this Declaration, we note that the five nationwide carriers advertise both prices and packages on a national

D. Applying the Commission's Initial Structural Screens

58. In the Cingular-AT&T Wireless matter, the Commission employed several initial "structural screens" to identify those local geographic areas (i.e., CEAs and CMAs) that warranted further detailed competitive analysis. There was no presumption that these markets would raise competitive concerns and, in fact, almost all of the markets that received more detailed analysis were ultimately found by the Commission to raise no such concerns.

59. The Commission used three structural screens in its initial analysis. The first screen identified for further analysis markets in which the post-merger Herfindahl-Hirschman Index ("HHI") would be 2800 or higher and the change in the HHI (i.e., the "Delta HHI") would be equal to or greater than 100 points. The second screen identified markets in which the change in the HHI would be 250 or higher, regardless of the post-merger HHI. The third screen identified markets where the merging parties would hold at least 70 MHz of wireless spectrum after the merger. The markets that were identified by these screens were subject to further analysis to determine whether there would be potential competitive harms if the transaction were approved without restrictions.[32]

60. Because we did not have access to the NRUF and carrier billing survey data used by the Commission in connection with the Cingular-AT&T Wireless proceeding, our analysis relies upon market share data purchased by Sprint and Nextel from Telephia.[33] We understand that the Telephia

level. This national strategy of these carriers could create competitive linkages across the local markets and constrain the ability of the carriers to discriminate among local markets.

[32] *Cingular-AT&T Wireless Order* ¶ 112.

[33] We understand that the Commission intends to employ data from NRUF and carrier billing records in its review of the Sprint-Nextel merger, and we would be interested in analyzing these data, as well.

data are widely used by wireless carriers in developing their competitive strategies.[34] We applied the Commission's initial structural screens to all of the local markets for which we have Telephia data.

61. The Telephia data provide estimates of market shares for wireless carriers in 235 local markets, each of which is a collection of counties. Market share data for 102 markets are based on consumer surveys regularly conducted by Telephia (Telephia Attitude and Behavior Survey (TABS)). Using a somewhat different methodology, Telephia estimates market shares for 133 ("snapshot") markets on an occasional basis. For these markets, Telephia determines market shares by using subscriber estimates that are obtained by electronically "querying" a panel of numbers and counting as subscribers those that return signaling information. Virtually all of the Telephia data are from 2004. (Data for six snapshot markets are from 2003.) In conducting our analysis, we conservatively included the shares of Sprint's affiliates and wholesale customers and Nextel Partners in the shares of Sprint and Nextel, respectively, which tends to overstate their market shares.

62. Table 1 lists the 235 Telephia local markets that we used in our analysis, detailing the subscriber shares of each carrier within those markets.[35] Table 2 shows the results of applying the Commission's two initial HHI-based structural screens to these markets. It lists those markets for which the post-merger HHI is 2800 or greater and for which the change in the HHI is 100 or greater. Table 2 also lists the additional markets for which the change in the HHI is 250 or greater.

63. Of the 235 Telephia markets, these screens identify 95 markets for further analysis. For example, San Angelo TX and Hammond LA would require more detailed evaluation because of high

[34] Although we have no reason to believe that there would be any significant difference between conclusions based upon the Telephia data and those based upon the NRUF data or carrier billing data, this view can only be confirmed after we have had the opportunity to analyze the additional databases.

[35] All tables appear in Appendix 2 to this Declaration.

post-merger HHIs (3380 and 5690, respectively). Gainesville FL is identified because the change in the HHI is 267.

64. The Commission's third initial structural screen identifies markets where the combined firm would have at least 70 MHz of spectrum, which represents about 35% of the spectrum available to provide CMRS in each market. The combined spectrum holdings of Sprint and Nextel would not reach 70 MHz in any of the Telephia markets that we examined, and most are well below that amount.[36] Thus, applying this screen does not add to the list of markets for which more detailed analysis is needed, according to the Commission's methodology.

E. Adjusting the Commission's Screens

65. Ninety-five Telephia markets would be identified for further competitive analysis if the structural screens used in the Cingular-AT&T Wireless transaction were applied to the Sprint-Nextel merger. However, the thresholds used by the Commission in the Cingular-AT&T Wireless transaction likely overstate the number of markets that deserve closer analysis in the Sprint-Nextel transaction. This is because the HHI levels in the screens used in Cingular-AT&T Wireless fail to account for several differences between the two mergers, differences that cause the competitive incentives of the merged firms in the two transactions to diverge.

66. First, Nextel is not an ILEC and the Sprint ILECs account for fewer than 5% of all switched access lines, all of which are intended to be spun off after the merger. By contrast, SBC and BellSouth, the owners of Cingular, account for more than 45% of all switched access lines. Second,

[36] Sprint and Nextel provided spectrum data to us on a BTA basis. We mapped the BTAs into Telephia markets using the county definitions of the Telephia markets and BTAs. Most Telephia markets were contained within one BTA. However, for those Telephia markets whose counties spanned more than one BTA, we matched the Telephia market with the most populated BTA. It should be understood in what follows that Telephia is the source of the subscriber market shares and Sprint and Nextel are the sources of the spectrum holdings data.

Sprint Nextel will generally have lower spectrum holdings than did Cingular-AT&T Wireless. Finally, the Commission may find that the Sprint-Nextel merger creates larger and more credible efficiency benefits than did the Cingular-AT&T Wireless transaction.

67. These three factors predictably lower the competitive risks raised by the Sprint-Nextel merger as compared to the Cingular-AT&T Wireless transaction. This suggests that the Commission should evaluate the Sprint-Nextel merger with more permissive initial structural screens.[37] In our analysis, we adjust the thresholds used in the screens to account for this lower risk. We discuss the three relevant risk factors in turn.

1. ILEC Integration

68. The most important differentiating risk factor is that the Cingular-AT&T Wireless transaction involved the acquisition of an independent wireless carrier by an entity owned by two major ILECs. This structural characteristic significantly increases the incentive to raise wireless prices and also raises intermodal competition issues that could lead to both higher wireline and wireless prices. In light of Sprint's far smaller presence as a local exchange carrier, and the fact that Sprint Nextel intends to spin off its limited ILEC holdings shortly after the merger is consummated, this factor is not a significant consideration in the Sprint-Nextel merger. This difference in incentives is the most important rationale for applying more relaxed structural screens to the Sprint-Nextel merger.

69. Relative to an independent wireless provider, an ILEC-affiliated wireless provider has less incentive to lower wireless prices in areas in which it is the local exchange carrier. This is because

[37] The fact that this merger reduces the number of national carriers from 5 to 4, and reduces by 1 the number of carriers in any local market where both Sprint and Nextel currently provide service, should not lead the Commission to consider reducing the HHI thresholds in the screens. A market with a HHI of (say) 2700 and a HHI delta of (say) 75 is not more prone to possible adverse competitive effects in this matter than in the Cingular-AT&T Wireless matter. Of course, the Commission's initial screens in this merger will identify more markets because the screens take the earlier transaction as given.

lower wireless prices encourage some wireline customers to switch to wireless service, which reduces wireline profits. Thus, an ILEC-affiliated wireless provider would only value the *incremental* profits associated with a wireline-to-wireless subscriber switch, whereas an unintegrated wireless provider would value the *total* profit from adding a new subscriber to its wireless service. This adverse intermodal pricing incentive effect arises even if substitution between wireless and wireline is limited mainly to secondary lines and the two products comprise separate relevant antitrust markets.[38] The magnitude of the impact on pricing incentives depends on the gains to the ILEC-affiliated wireless carrier from obtaining wireless customers from other wireless carriers as compared to the costs of "cannibalizing" its existing wireline customers.[39]

70. In addition, an ILEC that is integrated into, and has a substantial share of, wireless service, also has the incentive to raise *wireline* prices relative to an unintegrated ILEC. This is because the integrated ILEC recognizes that higher wireline prices would cause some substitution to its own wireless carrier. In the case of Cingular-AT&T Wireless, the Commission could reasonably have concluded that the merger would increase somewhat the incentives of BellSouth and SBC to raise wireline prices because the now-affiliated AT&T Wireless would capture some of the lost customers. The extent to

[38] Wireless services would not likely be such a potent constraint on wireline pricing that the antitrust market for wireline services would include wireless services under the market definition paradigm of the *Merger Guidelines.*

[39] ILEC-affiliated wireless carriers pay interconnection charges to themselves on in-region calls. This might appear to suggest they would earn a higher profit margin on a new subscription than does an independent wireless carrier, which would induce them to charge lower wireless prices. However, their incentives actually are more complex and likely push in the direction of higher prices. First, the ILEC-affiliated carrier would earn those same interconnection fees if instead the independent carrier obtained the customer, which eliminates any increased incentive to attempt to cannibalize the independent's subscribers. Second, as discussed in the text, the ILEC-affiliated carrier would want to charge relatively higher prices than would an independent, because it recognizes the opportunity cost of cannibalizing its own wireline subscribers. Thus, on balance, in a maturing wireless market, it is unlikely that the ILEC-affiliated wireless carrier would choose to set a lower price than would an otherwise comparably-situated independent.

which integrated ILECs can act on this wireline pricing incentive depends upon the effectiveness of regulatory oversight.

71. Finally, an ILEC that is integrated into wireless service has the incentive to degrade wireless rivals' access to its wireline network and to raise interconnection charges to competing wireless carriers, relative to an unintegrated ILEC. This exclusionary conduct would increase the integrated ILEC's profits. Here, too, the incentive and ability to engage in either type of exclusionary conduct depend upon the effectiveness of regulatory oversight.

72. This difference between the Cingular-AT&T Wireless transaction and the Sprint-Nextel merger implies that the Sprint-Nextel combination raises fewer competitive concerns. Although the Commission approved the Cingular-AT&T Wireless transaction, it viewed the loss of the independent (unintegrated) AT&T Wireless as cause for competitive concern. For example, the Commission observed that the record evidence "indicates that Cingular has developed and marketed many of its wireless products and services to complement—and specifically not to replace—residential wireline voice services."[40] The Commission also noted the clear contrast with AT&T's incentives: "unlike Cingular whose strategies are influenced by SBC's and BellSouth's concerns about its wireline revenues and access lines, {the pre-merger} AT&T Wireless is not likely to be concerned with the impact of its strategies on wireline revenues or access lines, except to the extent that they represent a potential source of new wireless customers. In fact, the documentary evidence indicates that AT&T Wireless sought to encourage mass market consumers to cut the {wireline} cord."[41] And the Commission recognized that the Cingular acquisition of AT&T Wireless would "further reduce Cingular's incentives to make

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[40] *Cingular-AT&T Wireless Order* ¶ 244.

[41] *Id.* ¶ 243.

available wireless substitute offerings {for wireline}..." and may reduce AT&T's incentive to continue to market and develop these wireless substitutes.[42]

73. Of course, the reduced incentive to lower wireless prices by ILEC-affiliated wireless providers is not the only adverse consumer effect of the ILEC affiliation. In addition, at the margin, the incentive of the ILEC-affiliated wireless carrier to invest in wireless innovation and to deploy new services will also be reduced. For ILEC-affiliated wireless carriers, investing in innovations that make wireless a more attractive substitute for wireline service will tend to further cannibalize their ILEC's wireline offerings. As the Commission noted, "SBC and BellSouth influence the development of Cingular's products and services; that some of Cingular's products and services are focused on retaining/integrating with ... its corporate parents' wireline customers; and that SBC and BellSouth plan to use the acquisition of AT&T Wireless, to some degree, to further this goal."[43]

74. Because the Sprint-Nextel merger does not involve a significant ILEC affiliation, the Commission can safely apply more permissive initial structural screens to this transaction. Similarly, the Commission also should take the lack of ILEC affiliation into account in its more detailed market-by-market competitive effects analysis.

2. <u>Spectrum Holdings</u>

75. We understand that there are many geographic markets in which the combined Cingular-AT&T Wireless has substantial spectrum holdings. Cingular-AT&T Wireless has more than 60 MHz in 41 of the top 106 Telephia markets for which we have spectrum holdings data for major carriers. In contrast, Sprint Nextel will have more than 60 MHz in only 1 of the 106 markets. In none of the 235

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[42] *Id.* ¶ 245.

[43] *Id.* ¶ 244.

Telephia markets do Sprint Nextel's spectrum holdings exceed 68 MHz, and most are well below this amount.

76. This evidence indicates that there would generally be *less* spectrum capacity available to competitors if Cingular-AT&T Wireless were to attempt to raise its prices after the merger than if Sprint Nextel were to attempt to do so. Because lower spectrum holdings create a reduced incentive to raise prices, the merger of Sprint and Nextel raises fewer competitive concerns.[44] We take spectrum shares into account in our more detailed analysis of markets that are identified by the initial screens. However, this risk factor also suggests that the Commission can safely apply more permissive structural screens at the initial stage of its analysis.

3. Efficiency Benefits

77. In any merger, the overall consumer impact depends on the relative magnitudes and likelihoods of anticompetitive harms and procompetitive benefits. The Commission did not give significant weight to Cingular-AT&T Wireless' cost-saving claims in balancing potential public interest harms and benefits.[45] It follows that if the Commission finds larger or more credible efficiency benefits in the Sprint-Nextel merger than it found in the Cingular-AT&T Wireless transaction, the Commission can be somewhat more permissive with respect to its competitive effects analysis. Just as the Commission demands more significant efficiencies when the likely competitive harms are more significant, it can similarly accept somewhat greater competitive risks where the efficiencies are larger or more credible. If the Commission credits the cost-savings for the merger claimed by Sprint and

[44] This is true even for markets that pass the Commission's initial spectrum screen since the amount by which they pass the screen also is relevant.

[45] *Cingular-AT&T Wireless Order* ¶ 232.

Nextel, that finding also would suggest that the Commission could safely apply more permissive initial structural screens.

F. Analysis Using Adjusted Levels for the Structural Screens

78. Because the Cingular-AT&T Wireless transaction generally provided a more risky balance of public interest benefits and harms than does the Sprint-Nextel merger, it is appropriate for the Commission to utilize somewhat more relaxed initial structural screens. We present results for several different degrees of modification, corresponding to various degrees of confidence in the importance of the three risk factors. In particular, we replace the Commission's HHI screens (i.e., a 2800 post-merger HHI plus a 100 HHI increase, or a 250 HHI increase for any post-merger HHI) with three alternative screens that increase these levels by 10%, 15%, or 20%.

79. Table 3 illustrates the 10%-adjusted HHI screen as applied to the 95 Telephia markets identified for further analysis by the Commission's initial HHI screens. If the Commission's screen levels are increased by 10% (i.e., a 3080 post-merger HHI plus a 110 HHI increase, or a 275 HHI increase for any post-merger HHI), the number of Telephia markets identified by the screens is reduced to 79. For example, the adjusted screen does not identify San Antonio for further analysis, which was identified using the Commission's screen because the HHI change was 259.

80. Table 4 lists the Telephia markets that are identified by the Commission's initial structural screen. The second column lists those markets that are identified by the 10%-adjusted screen. If the Commission's screen levels are increased by 15% (i.e., a 3220 post-merger HHI plus a 115 HHI increase, or a 287.5 HHI increase for any post-merger HHI), the number of Telephia markets identified for further analysis declines to 70. The 9 additional markets that are no longer identified are the ones below the line in the second column of the Table. Finally, if the Commission's screen levels are increased by 20% (i.e., a 3360 post-merger HHI plus a 120 HHI increase, or a 300 HHI increase for any

post-merger HHI), the number of Telephia markets identified by the screens falls to 60. The 10 additional markets that are no longer identified for further analysis are the ones below the line in the third column of the Table.

81. In its *Cingular-AT&T Wireless Order*, the Commission did not presume that the markets that were identified for further analysis by its initial screens were necessarily ones in which the Cingular-AT&T Wireless transaction would harm consumers. Instead, the Commission undertook more detailed competitive analysis of these markets. This is because the Commission stated that "a calculation of the HHI in a market is only the beginning of our analysis of the competitive effects of the merger, because its purpose is to eliminate from further analysis markets in which there is no potential for competitive harm."[46]

82. We follow the same basic methodology in this Declaration. For purposes of this Declaration, we conservatively use the 10% adjustment factor, so that our more detailed analysis focuses on the 79 markets identified by these adjusted initial screens. Our assumption that the subscribers of Nextel Partners, Sprint's affiliates, and Sprint's wholesale customers are included in the Sprint Nextel share is also conservative, i.e., this assumption has the effect of identifying more markets for further analysis than might in fact be warranted. However, even if the Commission were to choose not to make any adjustments to its structural screens, the Commission should still account for the Sprint-Nextel transaction's lack of ILEC affiliation, lower spectrum holdings, and efficiency benefits when balancing the competitive harms and consumer benefits of this transaction.

[46] *Id.* ¶ 184.

IV. Unilateral Effects Analysis

83. In its *Cingular-AT&T Wireless Order*, the Commission followed its initial structural analysis with a more detailed market-by-market evaluation of the potential for anticompetitive unilateral effects. The Commission focused on a number of factors that would be relevant to the evaluation of these effects. In this section, we first set out the framework for unilateral effects analysis. We then examine the key economic factors. These factors include the closeness of substitution between Sprint and Nextel, the potential for competitor repositioning and expansion, and the efficiency benefits of the merger.

A. Unilateral Effects Framework

84. In the *Cingular-AT&T Wireless Order*, the Commission concluded that wireless service is a differentiated product. It then followed the basic framework in the *Merger Guidelines* for analyzing unilateral effects in differentiated product markets. We also follow that framework. We examine the likelihood that the merged firm would gain the power and incentive to raise its post-merger price unilaterally, that is, even if it assumes that other competitors would not follow its price increase.

85. The most serious unilateral effects concerns arise when the merged firm becomes by far the largest firm in the market. In every Telephia market but one (Brownsville TX), Sprint Nextel's market share is under 50% (and [ ] in Brownsville).[47] In contrast, Cingular and AT&T Wireless had a combined subscriber share of more than 50% in 30 of the Telephia markets. These markets, and Cingular's shares, are listed in Table 5. For example, absent divestitures, Cingular would have achieved a subscriber share of [ ] in Tupelo MS, [ ] in Hammond LA, and [ ] in Telephia's Texas 6-Jack market. Moreover, many of the markets in which Cingular had a dominant market share were

[47] In this market, T-Mobile is the next-largest competitor, with a market share of [ ].

located in the ILEC regions of BellSouth and SBC. In over a third of these 30 markets, the Commission conditioned its approval of the Cingular-AT&T Wireless merger on spectrum or asset divestitures.

86. At least three key economic factors may deter unilateral price increases – low diversion ratios between the merging parties, the ability of rivals to reposition and expand output in response to a price increase, and the efficiencies of the merger. We discuss these three factors in turn.

B. Diversion Ratios and Closeness of Substitutes

87. The more distant substitutes are the products of the merging firms, the smaller is the post-merger incentive to raise price, other things equal. In the pre-merger market, a firm's profit-maximizing price is set at the level where the additional profits gained from the higher price charged to customers who remain with the firm are just equal to the profits lost from customers who switch to other firms, or purchase less. After the merger, the firm recaptures lost profits from the fraction of its lost customers who switch to the service of the now-acquired rival. This fraction is called the *diversion ratio* and affects the degree of profit recapture. As the diversion ratio decreases, the profit recapture rate decreases, and the incentive to raise price correspondingly declines.[48] As discussed below, there is no evidence that Sprint and Nextel are each other's next-best substitute. This suggests that the diversion ratio between them should be relatively small.

1. Customer focus

88. Sprint and Nextel do not share a common customer focus, which reduces the extent to which Sprint customers regard Nextel as a close substitute for Sprint, and similarly for Nextel's customers. Nextel's focus is much more skewed toward enterprise customers than is Sprint's. This

[48] As discussed earlier, if the wireless firm is owned by an ILEC, its profit recapture calculation will also include the diversion to and from its wireline operations, which can further raise its incentives to increase both wireless and wireline prices.

difference in focus also is reflected in part by the features that each promotes. Nextel is noted for its enterprise-friendly push-to-talk feature. In contrast, Sprint promotes color screen handsets, picture phones, data use, and the elimination of overages that are designed to appeal to non-enterprise customers.

2. Customer switching data

89. We have also reviewed data from Nextel and Sprint on customer switches following the introduction of wireless local number portability ("WLNP") and from exit surveys conducted by both merging parties. Evaluating subscriber switches by Nextel and Sprint subscribers can provide insight into the extent to which consumers regard Nextel and Sprint as close substitutes relative to other carriers. Although a single observation of switching behavior in a market may not always accurately measure long-term substitution behavior, switching patterns over a longer period of time can nonetheless be helpful in assessing whether two services are each other's closest substitutes. The data indicate that Sprint and Nextel are not each other's closest substitutes.

a) Number Portability Data

90. The WLNP data indicate that the subscriber switches between Sprint and Nextel are lower than those between each firm and their ILEC-affiliated competitors. Of the subscribers that left Nextel in 2004, only [ ] switched to Sprint. In contrast, [ ] of the lost Nextel subscribers switched to [ ] and [ ] switched to [ ] and [ ]. (See Table 6.)

91. Similarly, of the subscribers that left Sprint in 2004, only [ ] switched to Nextel. In contrast, [ ] of those Sprint subscribers switched to [ ] and [ ] switched to [ ] and [ ]. Thus, according to these data, Sprint and Nextel do not appear to be particularly close competitors.

92. This WLNP data can be disaggregated into residential and enterprise subscribers with the same result. In the residential segment, only [ ] of the lost Nextel subscribers switched to Sprint, versus [ ] to [ ] and [ ] to [ ] and [ ]. (See Table 7.) For Sprint's residential customers, only [ ] switched to Nextel versus [ ] to [ ] and [ ] to [ ] and [ ].

93. In the enterprise segment, only [ ] of the lost Nextel subscribers switched to Sprint, versus [ ] to [ ] and [ ] to [ ] and [ ]. (See Table 8.) For Sprint's exiting enterprise customers, only [ ] switched to Nextel versus [ ] to [ ] and [ ] to [ ] and [ ].

94. Using the WLNP data to predict diversion ratios is subject to several criticisms, some of which have been previously noted by the Commission.[49] First, the WLNP data involve all switches, not just those that arise in response to price increases. Second, because many subscribers have long-term contracts with their carriers, the originating carrier may no longer be the next-best alternative to the subscriber's new carrier by the time that the subscriber actually makes the switch. Third, the WLNP data contain two different measures of switching, the number of subscribers who switch away from a carrier ("port-out") and the number who switch to a carrier ("port-in"). There can be substantial differences between the two measures. Fourth, the WLNP data do not identify subscribers who reduce their wireless usage or drop their wireless subscriptions altogether. We discuss these criticisms briefly, in turn, and conclude that they do not undermine the use of these data for competitive analysis. That is, these criticisms do not imply that Sprint and Nextel should be regarded as especially close competitors, but rather that the porting data may have some limitations in assessing the closeness of substitution.

[49] *Cingular-AT&T Wireless Order* ¶ 131.

95. *Use of Historical Data on all Switches:* Aggregate historical switching data capture substitution from all causes, not just price changes. For example, suppose that subscribers care about quality as well as price. If one carrier reduces its quality, the resulting substitution pattern could be different from the substitution pattern that would occur if the carrier instead had raised its price.[50] However, because competition involves quality as well as price, substitution in response to quality differences still could be relevant to unilateral effects analysis.[51]

96. *Long-Term Contracts:* Historical switching data also can be potentially misleading when there are long-term contracts. The long-term contracts can slow down consumer switches and carrier rankings can change during the interim. This possibility suggests that porting data provide "noisy" measures of substitutability among carriers, but not necessarily that they produce biased measures.

97. *Multiple Diversion Measures:* The diversion ratio could be measured from data on switches away from (ports-out) or switches to (ports-in) a carrier. These two measures generally will differ because the total number of switches away from each of the other carriers will affect the percentage of a carrier's new subscribers who come from any particular carrier, not just the consumer preferences among the carriers. For this reason, substitution away from a carrier provides a better estimate of the diversion ratio than substitution to a carrier.

98. *Overstatement of Diversion Ratios:* Switching percentages may overstate actual diversion ratios. When a carrier raises its price, some subscribers will shift to other wireless carriers. Other dissatisfied customers instead stay with their current carrier but reduce their wireless usage. In addition,

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[50] Only if all of the carrier's subscribers value the carriers on the basis of quality per dollar of cost, and all subscribers measure quality changes in the same way, would the price and quality diversion ratios be equal.

[51] If the Commission decides that unilateral effects analysis should be focused solely on price, then the use of quality-based diversions could bias the results, but the direction of any bias would be unclear.

some dissatisfied customers may decide to give up wireless service entirely instead of switching to a new wireless carrier. The estimated diversion ratio should take account of these factors. These factors imply that the total number of subscribers who switch away from a carrier is likely to understate the carrier's total volume loss.[52]

99. *Conclusion*. The WLNP data have limitations. Nonetheless, observing over a significant period of time that Nextel subscribers consistently tend to switch more to Cingular and Verizon Wireless than they do to Sprint provides evidence that Nextel customers regard Cingular and Verizon Wireless as better substitutes for Nextel than Sprint, so that Cingular and Verizon Wireless will have higher diversion ratios. Similar evidence suggests that Sprint customers also regard Cingular and Verizon Wireless as better substitutes than Nextel. In addition, the comparable results from the Nextel and Sprint exit surveys discussed next increase the confidence in these data for inferring consumer substitution patterns and relative diversion ratios.

b) <u>Nextel's Exit Surveys</u>

100. We also have reviewed data from exit surveys that Nextel conducted among its departing subscribers at the end of 2004. The exit survey results also indicate that Sprint's wireless service is not the next-best choice of most Nextel customers, although they may be subject to some of the same kinds of criticisms as the WLNP data.

[52] The impact of the overstatement of diversion ratios on gauging incentives would be smaller for an ILEC-affiliated wireless carrier. That carrier would take into account the substitution between wireless and wireline caused by price changes. For example, customers who are deciding whether to drop a wireline number for wireless, or what type of additional telephony service to obtain, would be more likely to stick with wireline if the carrier's wireless prices were higher. The ILEC-affiliated carrier would reckon the (marginal) impact on its wireline profits into its wireless pricing calculus, whereas the independent wireless carrier would not.

101. Nextel's survey asked departing customers to identify their replacement wireless provider if they have switched, or intend to switch, carriers. As reported in Table 9, only about [ ] of these departing customers identified Sprint. In contrast, [ ] identified [ ] as their replacement carrier and [ ] identified [ ]. The pattern was similar when the sample was split into enterprise and residential customers and into different regions. Only about [ ] of the enterprise customers and [ ] of the residential customers identified Sprint as the replacement carrier. [ ] and [ ] were the replacement carriers for the vast majority of exiting Nextel subscribers.

102. Nextel also tabulated the results for three separate regions of the country-North, South and West-with the same results. The percentage of exiting Nextel subscribers who identified Sprint as their replacement carrier was only [ ] in the North, [ ] in the South, and [ ] in the West.

103. Like the WLNP data, the use of the exit surveys to infer service substitutability is not problem-free. However, as with the WLNP data, there is no reason to believe that the data are biased. Therefore, these data can be useful as evidence for inferring the low likelihood of adverse unilateral effects in this matter.

c) <u>Sprint's Exit Surveys</u>

104. Sprint also conducts exit surveys of its departing customers. These surveys identified a subset of exiting customers who identified price as their main reason for leaving Sprint.[53] The Sprint survey results are consistent with the Nextel surveys and the WLNP data. As reported in Table 10, fewer than [ ] of departing Sprint customers who said that they switched on the basis of price moved

[53] This data set only includes those subscribers who switched to another major carrier, not customers who switched to regional carriers or dropped their wireless service entirely. Thus, the calculated diversion ratios would be overstated.

to Nextel, versus [ ] who switched to [ ] and [ ] who switched to [ ].

105. These data are not subject to the criticism that the results may reflect choices made in response to factors other than price changes. In addition, because the results from the Sprint exit surveys are consistent with the results from the WLNP data and the Nextel exit surveys, one can place greater confidence in the use of all of these data to predict low substitution between Sprint and Nextel.

106. A substantial fraction of all exiting Sprint customers also reported that they dropped wireless service altogether. For the summer of 2003, the apparent diversion to "no wireless service" (presumably, to wireline service only) was [ ]. In the summer of 2004, the corresponding figure was [ ]. These results suggest that wireline options apparently continue to play a significant role in the decisions of consumers in choosing wireless service. These results also suggest that the wireline cannibalization rate may be substantial and that the switching data overstate diversion ratios among wireless carriers.

C. <u>Competitor Repositioning and Expansion</u>

107. If competitors can easily reposition their products and expand their output in response to a competitor's unilateral price increase, that price increase will be less profitable. In the case of wireless mobile service, rivals could increase the number of cell sites and more closely match, for example, the calling plans of the merging firm. As discussed below, our analysis indicates that the ability of competitors to reposition and expand would significantly constrain the profitability of unilateral price increases by Sprint Nextel.

108. In its review of the Cingular-AT&T Wireless transaction, the Commission noted that a key factor in its competitive effects evaluation was the availability of spectrum that rival carriers might

use to absorb subscribers from the merged firm in the event of a post-merger price increase. In particular, for a sample of markets, the Commission asked "whether other carriers could absorb in the near term an increase in subscribers equal to 10 percent of the merged entity's subscribers in that market."[54]

109. Specifically, the Commission noted that "where a firm is already present in a market, has comparable service coverage, and has excess capacity relative to its current subscriber base, it should be able to adjust rates, plan features, handsets, advertising, etc., in the short run."[55] The Commission went on to state, "As a technical and operational matter, it will generally be feasible for firms to add customers quickly because excess capacity is often available and because non-trivial increases in the capacity to service customers can be realized rapidly in established cellular and PCS mobile radio systems."[56] This suggests that if Sprint Nextel were to attempt a unilateral price increase, rivals could respond by expanding their service and repositioning their subscriber plans to be more similar to those offered by Sprint Nextel, attracting customers away from Sprint Nextel, and thus reducing the price-increasing incentive of the merged firm.

110. Of course, the strength of the rivals' response to a unilateral price increase by Sprint Nextel depends importantly on whether rivals can expand the number of subscribers that they serve (e.g., by cell splitting or increasing coverage) without incurring any significant increase in incremental costs and without incurring any reduction in the quality of service. Determining whether sufficient spectrum capacity exists to permit the carriers to absorb the additional Sprint Nextel subscribers under

[54] *Cingular-AT&T Wireless Order* ¶ 136.

[55] *Id.* ¶ 134.

[56] *Id.* ¶ 135. The Commission also noted that "there are limits to repositioning. Firms may not be able to add quickly to their operating footprints, purchase additional spectrum if needed, secure tower siting permits, improve overall quality, or deploy a new technology." *Id.* ¶ 137.

these conditions is a complicated technical and economic matter, given the factors that affect spectrum efficiency, including the particular spectrum band that is being used, geographic conditions, and differences in technologies, among others.

111. There are many more markets in which Cingular-AT&T Wireless has a dominant share of subscribers than will Sprint Nextel. At the same time, Sprint Nextel's rivals will generally have more capacity than do the rivals of Cingular-AT&T Wireless. Sprint Nextel has more than 60 MHz of spectrum in only one of the 79 local markets that were identified for further analysis by the most conservative adjusted version (i.e., 10%-adjusted) of the Commission's structural screens. In contrast, Cingular-AT&T Wireless has more than 60 MHz in almost half of the markets (among the 79 markets) for which we have carrier-specific spectrum shares.[57]

112. In this Declaration, we have implemented, on a market-by-market basis, the Commission's suggestion to evaluate the number of additional subscribers that rivals could serve with their existing spectrum capacity.[58] We do not know precisely how the Commission conducted its own analysis. In this Declaration, we make the assumption that full capacity in a market is equal to the maximum number of subscriber share points that can be supported by 1 share point of spectrum among the major carriers. We use the carrier in each market with the largest subscriber share relative to its spectrum share to calculate this assumed maximum. We then apply that maximum to every firm in the market to determine the maximum subscriber share points that rivals of Sprint Nextel could support. These assumptions may be refined with subsequent analysis. To estimate the ability of the Sprint Nextel rivals to absorb additional share points, we then subtract the current share of the rivals from the (assumed) maximum supportable share points of the rivals.

[57] We only have spectrum shares for carriers other than Sprint and Nextel for a subset of the markets.

[58] *Cingular-AT&T Wireless Order* ¶ 136.

113. This difference thus estimates the ability of the rivals using existing spectrum to absorb additional subscribers, which we refer to as the rival's Subscriber Absorption Capacity (SAC). We then use the SAC measure for each carrier to determine whether rivals collectively have sufficient excess spectrum capacity to absorb 10% of Sprint Nextel subscribers, if those subscribers wished to switch carriers in response to a hypothetical post-merger unilateral price increase by the merged firm.

114. To illustrate our methodology, assume that Sprint Nextel's three rivals in a hypothetical market have the subscriber and spectrum shares listed in the example below. The largest ratio of subscriber share to spectrum share is for Carrier A, for which every share point of spectrum supports 1.67 subscriber share points. If we assume that this ratio represents full capacity utilization for all three rival carriers, then the other carriers can support maximum subscriber shares of 12.5% each (i.e., 1.67 times 7.5%). Because each of these rivals currently accounts for 5% of subscribers, each has a SAC equal to 7.5 share points, as shown in the last column of the example. Taken together, the total SAC for these competitors (i.e., 15%) exceeds 10% of Sprint Nextel's subscriber share in this illustrative example.

Subscriber Absorption Capacity (SAC): An Example

	Subscriber Share	Spectrum Share	Ratio	Maximum Subscriber Share	SAC
Sprint Nextel	65%	70%	.93	na	na
Carrier A	25%	15%	1.67	25%	0
Carrier B	5%	7.5%	0.67	12.5%	7.5%
Carrier C	5%	7.5%	0.67	12.5%	7.5%
	100%	100%			15.0%

115. We recognize that this methodology is subject to a number of caveats. First, we used the carrier in each market with the largest subscriber share relative to its spectrum share to calculate the assumed maximum capacity utilization. This assumption does not take into account possible differences in maximum spectrum utilization of various carriers. It also means that markets will differ significantly with respect to the assumed number of subscribers that can be served with a given amount of spectrum. Consequently, the results calculated for some markets may turn out to be implausible. Second, at this time, the spectrum share data for all carriers necessary to carry out this analysis is available to us only for the top 106 markets. For other markets, we only have data for the spectrum holdings of Sprint and Nextel. To deal with this data limitation, we calculated the maximum (full-capacity) subscriber share points per spectrum share point in these smaller markets based on the average of the maximums of the top 106 markets, which is a ratio of 1.77. We may be able to modify this assumption if additional data on spectrum holdings become available to us. Third, in those markets for which we did not have carrier-specific spectrum data, we assumed that a total of 200 MHz of spectrum is available in each of those markets, as described by the Commission in the *Cingular-AT&T Wireless Order*.[59]

116. The approach used here to measure excess spectrum capacity is conservative in several significant dimensions. First, the "full capacity" carrier is assumed to be incapable of absorbing *any* additional customers beyond the normal growth at stable prices, so that there is no subscriber capacity cushion available to that carrier. A subscriber capacity cushion would further deter post-merger price increases.

117. Second, in calculating available spectrum capacity, the SAC test excludes unassigned Auction 58 spectrum. The acquisition and use of additional spectrum by Sprint Nextel's competitors would further deter post-merger price increases. If a market fails to pass the SAC test, it would be

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[59] *Id.* ¶ 81.

necessary to examine the results of Auction 58 to determine whether additional spectrum is being made available to Sprint Nextel's rivals in that market. In this regard, the Commission has noted that the ability to deter post-merger price increases may depend in part on the ability of rival carriers "to obtain access to additional spectrum suitable for the provision of mobile telephony services in the relevant market in a reasonably short period of time."[60] In evaluating the Cingular-AT&T Wireless transaction, the Commission considered the impact of additional spectrum from both Auction 58 and from spectrum that could be leased from NextWave.

118. Third, to the extent that wholesale customers of Sprint, Cingular, and Verizon Wireless have longer-term, fixed-price contracts for wireless service, these customers can expand their retail sales in the event of a post-merger price increase. Thus, these wholesale customers can act as a further constraint on the pricing of Sprint Nextel. However, in this Declaration, we do not take this factor into account in the SAC analysis.

119. Finally, even if a market fails to satisfy the SAC test, a unilateral price increase would not necessarily be profitable. If it were to impose a price increase, Sprint Nextel would lose subscribers to other carriers and wholesalers, as well as experience reduced sales to subscribers who cut their usage or drop wireless service altogether, such that the price increase could be unprofitable. Thus, the SAC test does not mark the end of the analysis.

120. Table 11 reports the results of our preliminary SAC analysis for the 79 markets that were identified by the adjusted levels of the structural screens. In all but one of these markets, other carriers have more than sufficient spectrum capacity to absorb 10% of Sprint Nextel subscribers. Even in the Brownsville TX market, where Sprint Nextel will have a subscriber share of [ ], the SAC methodology indicates that its rivals would have sufficient excess capacity to absorb an additional 87

[60] *Id.* ¶ 189.

share points, or [ ] times the [ ] share points that that they would need to absorb under the Commission's 10% output reduction assumption.

121. The only market that fails the SAC test for unilateral effects is Minneapolis. In that market, Sprint Nextel will have a subscriber share of [ ] and, as a result, rivals of the merged firm must have sufficient excess SAC to absorb [ ] share points in order to defeat a hypothetical unilateral price increase. However, according to the method used in our calculations, Sprint Nextel's rivals could absorb only 0.3 share points, which seems implausibly small in light of Sprint Nextel's modest leading market share.

122. The reason for this small SAC is that the maximum ratio of subscriber share to spectrum share in Minneapolis is only 1.09, one of the lowest ratios in the entire data set. Given the rapid wireless subscriber growth (i.e., 14% nationally), it seems implausible that there is so little room for expansion in Minneapolis and that the "full capacity" carrier does not have any subscriber capacity cushion beyond normal growth. After all, Sprint Nextel will have a subscriber share of less than [ ], which means that its competitors would need to expand their volumes by only about 4% each (e.g., from a [ ] share to a [ ] share) to close the [ ] share point gap.[61] The merged firm would face three other national competitors, each with more than a [ ] subscriber share, so making up this small gap seems highly likely.

123. Even if the current capacity in Minneapolis is found to be so limited that the gap cannot be absorbed with current spectrum capacity, the spectrum capacity in the market will grow. We understand that 40 MHz of additional spectrum will become available in Minneapolis as a result of Auction 58. This increased spectrum will further reduce any competitive concern if Sprint Nextel's competitors obtain some of it. Thus, following the Commission in accounting for excess spectrum

[61] That is, [ ] share points is about 4% of [ ] share points.